

Notice of Allowability

Application No.

09/934,886

Examiner

Shawki S. Ismail

Applicant(s)

CALVIGNAC ET AL.

Art Unit

2155

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Appeal Brief filed on November 14, 2005.
2. ☒ The allowed claim(s) is/are 1-12.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has **THREE MONTHS FROM THE "MAILING DATE"** of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in **ABANDONMENT** of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

EXAMINERS AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and /or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such amendment, it must be submitted no later than the payment of the issue fee.

2. Authorization for this examiner's amendment was given in a telephone interview with Joscelyn Cockburn (Reg. No. 27,069) on February 15, 2005.

3. The application has been amended as follows:

Claims 1-12 have been replaced with the following amended claims 1-12.

1. (Previously Presented) A method of operating a network for transmission of data between users, and wherein said network includes at least one network processor and at least one coprocessor associated with said network processor, and wherein said data is passed to said network processor in data packets, said method comprising:

each of said network processors encapsulating the data in each packet into a data frame before transmission on the network, and wherein said network processor provides a header for the data in each data frame which includes all the information necessary to direct the coprocessor to perform all required operations on said data

passing at least some data frames, including the header thereof, from said network processor to said coprocessor associated therewith before transmission on the network,

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performing any operations required by the header in said coprocessor on said data before transmission on the network,

modifying said header information by said coprocessor after performing said required operations,

returning said data frame from said coprocessor to said network processor with said modified header, and

thereafter transmitting said data with said modified heading on said network.

2. (Currently Amended) The invention method as defined in claim 1 wherein all data frames with said created headers are sent to the coprocessor associated with said network processor and said coprocessor returns said data in the order it was received from the network processor.

3. (Currently Amended) The invention method as defined in claim 1 wherein said network processor can receive data with the modified data header, passing said received data with the modified header to said coprocessor associated therewith, restoring the data from its modified form to its original form in the coprocessor and returning said stored data to the network processor.

4. (Currently Amended) The invention method as defined in claim 3 wherein there is at least two network processors on said network and each of said processors is configured to pass data with created headers therebetween.

5. (Currently Amended) The invention method as defined in claim 2 wherein the information for generating said header is contained, at least in part, in said network processor.

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6. (Currently Amended) The method as defined in claim 3 wherein the information for generating said header is contained, at least in part, in said data packets (col. 12, lines 45-57).

7. (Currently Amended) A ~~network~~ system for transmission of data between users comprising:

a network processor and at least one coprocessor associated with said network processor, said data being passed to said network processor in data packets,

each of said network processors including programming which encapsulates the data in each packet into a data frame before transmission on the network, including a header for the data in each data frame, which header includes all the information necessary to direct the coprocessor to perform all required operations on said data and to pass at least some data frames, including the header thereof, from said network processor to said coprocessor associated,

programming in said coprocessor to read and perform any operation required by the header on said data before transmission on the network,

programming in said coprocessor to modify said header information after performing said required operations on the data and to return said data frame from said coprocessor to said network processor with said modified header,

Thereafter transmitting said data with said modified heading on said network.

8. (Currently Amended) The ~~invention~~ system as defined in claim 7 wherein said programming in said network processor will send all data frames with said created headers to the coprocessor associated with said network processor, and said

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programming in said coprocessor will return said data frames in the order they were received from the network processor.

9. (Currently Amended) The invention system as defined in claim 7 wherein said programming in the network processor can receive data with the modified data header, pass said received data with the modified header to said coprocessor associated therewith, and said programming in said coprocessor can restore the data from its modified form to its original form in the coprocessor and return said restored data to the network processor.

10. (Currently Amended) The invention system as defined in claim 7 wherein there is at least two network processors and each of said processors is configured to pass data with created headers therebetween.

11. (Currently Amended) The invention system as defined in claim 7 wherein the information for generating said header is contained, at least in part, in said network processor.

12. (Currently Amended) The invention system as defined in claim 7 wherein the information for generating said header is contained, at least in part, in said data packets.

REASONS FOR ALLOWANCE

4. The following is an Examiner's Statement of Reasons for Allowance:

Claims 1-12 are allowable over the prior art of record.

The examiner has found that the prior art of record does not teach or suggest or render obvious a stateless message-passing method and system for interactions between a network processor and a coprocessor. The major difference in the independent claims not found in the prior art of record is that the processor takes a data packet, makes it into a frame with headings and then passes the frame with the headings to the coprocessor, which the coprocessor performs any operation required by the header, modifies the header and returns the frame to the processor and the processor then transmits the packet with the modified headings on to the network as set forth in the specification and recited in the independent claims 1 and 7.

5. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and , to avoid processing delays, should preferably accompany the issue fee. Such submission should be clearly labeled "Comments on Statement of Reasons for Allowance."

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shawki S Ismail whose telephone number is 571-272-3985. The examiner can normally be reached on M-F 8:30 - 5:00.

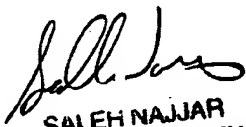
If attempts to reach the examiner by telephone are unsuccessful, the examiner's

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supervisor, Saleh Najjar can be reached on 571-272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Shawki Ismail
Patent Examiner
February 15, 2006



SALEH NAJJAR
SUPERVISORY PATENT EXAMINER



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|---|-------------|----------------------|---------------------|------------------|
| 09/934,886 | 08/22/2001 | Jean Louis Calvignac | RAL920010026US1 | 8162 |
| 26675 | 7590 | 02/22/2006 | EXAMINER | |
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Please find below and/or attached an Office communication concerning this application or proceeding.